

Patent Claims

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1. A measuring probe (1) with a sensor-active layer in the form of an electrical dipole for the detection of agents and their concentration in gases and/or liquids so characterized that a covering film (7) from a liquid is located above the sensor-active layer of the measuring probe (1).
2. A measuring probe (1) with a sensor-active layer in the form of an electrical dipole for the detection of agents and their concentration in gases and/or liquids according to claim 1 so characterized that the covering film (7) consists of water.
3. A measuring probe (1) with a sensor-active layer in the form of an electrical dipole for the detection of agents and their concentration in gases and/or liquids according to claim 1 and 2 so characterized that the covering film (7) consists of the liquid to be analyzed.
4. A measuring probe (1) with a sensor-active layer in the form of an electrical dipole for the detection of agents and their concentration in gases and/or liquids according to claims 1 to 3 so characterized that several measuring probes (1) are combined in an array with various structural dimensions and the individual structures show differing substances (4).
5. A measuring probe (1) with a sensor-active layer in the form of an electrical dipole for the detection of agents and their concentration in gases and/or liquids according to claims 1 to 4 so characterized that measuring probes (1) are combined with other measuring probes for the determination of the differing physical parameters.

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6. A measuring probe (1) with a sensor-active layer in the form of an electrical dipole for the detection of agents and their concentration in gases and/or liquids according to claims 1 to 5 so characterized that the measuring probe
5 (1) is directly implemented into the control circuit of a semiconductor component.

7. A measurement procedure for the detection of agents and their concentration in gases and/or liquids by means of a measuring probe (1) according to claims 1 to 6 so characterized that a covering film (7) consisting of a liquid,
10 which film is located above the substance (4) of the sensor-active layer, can be included in the active zone of the measuring probe (1) and that the combination of various partial conductances, in particular, for the substance (4),
15 the covering film (7) and the active surface (8) formed between both of these can be included in the determination of the total conductance without compensation.

8. Measurement procedure for the detection of agents and their concentrations in gases and/or liquids using a measuring probe (1) according to claim 7 so characterized that
20 measured values can be transmitted over EDP networks or/and telecommunications facilities to authorized recipients.

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Summary

The invention describes a sensitive measuring probe (1) and an associated measuring procedure for the detection of agents and their concentration in gases and/or liquids and this measuring probe (1) can be used under the most varied real measuring conditions without additional expenditure and does not require a heating element.

According to the invention, this requirement is fulfilled in that a covering film (7) consisting of a liquid is located above the sensor-active layer of a measuring probe (1) and the covering film (7) is included in the active zone of the measuring probe (1) and the combination of various partial conductances, in particular, of the substance (4), the covering film (7) and the active surface (8) formed between both of these is included in the determination of the total conductance without compensation.

See figure 1.

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